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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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ING, MATTHEW W

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3637

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/824,350  
Filing Date: April 15, 2004  
Appellant(s): CHO, NAM SEON

James T. Eller (Registration No. 39,538)  
For Appellant

**EXAMINER'S ANSWER**

Art Unit: 3637

This is in response to the appeal brief filed 8/10/09 appealing from the Office action mailed 10/27/08.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

**(5) Summary of Claimed Subject Matter**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**5,542,795**

**Mitchell**

**8-1996**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-4, 6-12, and 15-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art disclosed by appellant in Figures 1-3 of the instant application (hereinafter APAA), in view of Mitchell (5,542,795).

APAA teach(es) the structure substantially as claimed, including a refrigerator door assembly, comprising a sliding door (3) configured to be slid open and closed; a handle (4) provided on a side-top edge surface of the door; and a plurality of handle holders (5) each having an end fixed to the door and another end attached to the handle, wherein the end fixed to the door comprises: a handle holder member (portion of the handle holder extending between numerals "5" and "4" in Fig. 1) extended to the handle.

The only difference between APAA and the invention as claimed is that APAA fail(s) to teach a supporting member protruded in a first direction on a lower surface of the handle holder member and receivable within a groove provided in the door, preventing damage from occurring on the handle holder, wherein the supporting member is disposed between the handle and a securing mechanism configured to secure a corresponding handle holder to the side of the door so as to absorb a force applied to the handle in a second direction opposite to the first direction and reinforce a strength of the handle holder when the sliding door is slid open and closed, and wherein the supporting member is integrally formed with the handle holder such that the supporting member and the handle holder are a single unitary piece.

Art Unit: 3637

Mitchell, however, teaches a supporting member (50) protruded in a first direction on a lower surface of the first structure (36) and receivable within a groove (32) provided on a second structure (22), preventing damage from occurring on the handle holder, wherein the supporting member (50) is disposed between the first structure and a securing mechanism (53) configured to secure said first structure (36) to a side of the second structure (22) so as to absorb a force applied to the handle in a second direction opposite to the first direction and reinforce a strength of the first structure. The examiner points out that whereas it is well known in the art that increasing the thickness of a structure increases its structural rigidity, integrally forming supporting members, as taught by Mitchell, upon the contacting surface between the handle holder and the door of APAA would obviously produce a structure capable of "preventing damage from occurring on the handle holder"; and capable of absorbing "a force applied to the handle in a second direction opposite to the first direction and reinforce a strength of the handle holder when the sliding door is slid open and closed".

It would have been obvious to one of ordinary skill in the art to include a supporting member, as taught by Mitchell, upon each of the handle-holders of APAA, between the handle & securing mechanisms thereof, in order to provide a stronger & more secure connection between said handle holders and the door, by preventing providing a mechanism to prevent slippage by said handle holders (col. 5, lines 51-67 of Mitchell); and in order to provide an aid to positioning said handle holders upon said door during manufacturing; and to form said supporting member and handle holder as a single unitary piece, since forming in one piece an article which has formerly been formed in two pieces and put together has been held to involve only routine skill in the art, thereby providing the structure substantially as claimed.

Art Unit: 3637

Regarding claim 3, whereas Mitchell teaches a supporting member (50) located on a contacting surface between a first (36) & second (22) structure; and whereas emplacing a supporting member between the handle holders & door of APAA would obviously require locating said supporting member on a lower contacting surface of each said handle holder; it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously produce a structure wherein the supporting member is located on a contacting surface between the handle holder and the door.

Regarding claim 4, whereas Mitchell teaches a supporting member (50) having a width smaller than a width of the first structure (36), it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously produce a structure wherein a width of the supporting member is smaller than that of the handle holder.

Regarding claim 6, whereas Mitchell teaches a groove (32) for inserting a supporting member (50) being formed on a second structure (22) around a recess (35) for accommodating a securing mechanism (53); and whereas, in the structure of APAA, analogous recesses for accommodating securing mechanisms (6) are located upon the door; it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously produce a structure wherein a groove for inserting the supporting member is formed on the door.

Regarding claim 7, whereas Mitchell teaches a groove (32) whose depth is the same as a thickness of the supporting member (50), it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously produce a structure wherein a depth of the groove is the same as a thickness of the supporting member.

Art Unit: 3637

Regarding claim 8, APAA teaches a structure wherein the handle holder is fixed to the door by a fixing part (6, 7) penetrating the handle holder.

Regarding claim 9, APAA teaches a structure wherein the fixing part (6, 7) is a screw (par. 21 of the instant application).

Regarding claim 10, APAA teaches a structure wherein the securing mechanism (6, 7) comprises at least two screws (par. 21 of the instant application) provided to fix the handle holder to the door.

Regarding claim 11, whereas Mitchell teaches locating a supporting member at a surrounding region of a hole (46) through which a screw is penetrated, it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously produce a structure wherein the supporting member is located at a surrounding region of each of the holes through screws are penetrated.

Regarding claim 12, whereas Mitchell teaches supporting member (50) located on a lower surface of a surrounding region of a hole (46) through which a screw (53) is penetrated; and whereas emplacing a supporting member between the handle holders & door of APAA would obviously require locating said supporting member on a lower contacting surface of each said handle holder; it can therefore be concluded that modification of the structure of APAA in view of Mitchell would obviously require including a supporting member around at least one of the screws of APAA. The examiner submits that such a structure could be described as having "a supporting member is located on a lower surface of a surrounding region of a hole through which a screw closer to the handle is penetrated", since even if the supporting member were located around the rear screw (7) of APAA, that portion of the lower surface of the handle holder

Art Unit: 3637

thereof would still be "a surrounding region of a hole through which a screw closer to the handle is penetrated". The examiner also points out that whereas mere duplication of the essential working parts of a device has been held to involve only routine skill in the art, it would have been obvious to include supporting members around each of the screws of APAA as modified by Mitchell; which resultant structure would obviously read upon the limitations of this claim. The examiner additionally points out that whereas Mitchell teaches a supporting (50) member located around a screw (53) proximate a front end of a first structure (32), modifying APAA in view of Mitchell would obviously imply including a supporting member at least around the screw closer to the front of the handle holder (and hence closer to the handle).

Regarding claim 15, APAA teaches a structure wherein the handle holder (5) is located on each side of the handle (4). See Figure 1.

#### **(10) Response to Argument**

In response to appellant's argument that Mitchell is nonanalogous art, it has been held that a prior art reference must either be in the field of appellant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the appellant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. In this case, Mitchell is viewed as teaching a connecting structure for connecting a removable component to a fixed one, just as appellant teaches a connecting structure for connecting a handle to a door, and is therefore viewed as being in appellant's field of endeavor. Additionally, whereas Mitchell teaches the inclusion of an additional connecting structure to provide a stronger connection by preventing slippage (see col. 5, lines 51-67) & in order to aid positioning, Mitchell is therefore viewed as being reasonably pertinent to the particular problem with which appellant was concerned.



Art Unit: 3637

Moreover, whereas it is well known in the art that increasing the thickness of a structure increases its structural rigidity, and whereas Mitchell teaches such an increase in thickness at the connection between fixed & removable components, Mitchell is therefore viewed as being reasonably pertinent to the particular problem with which appellant was concerned.

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Matthew W. Ing/

Matthew Ing, Examiner, Art Unit 3637

Conferees:

Lanna Mai /LM/

Heather Shackelford /hcs/